

# SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by  
Regulation(EU) No. 2020/878

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name: RTV 12A

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Silicone Elastomer

Uses advised against: Not known.

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Importer/Distributor Information** : Momentive Performance Materials GmbH  
Chempark Leverkusen Gebaeude V7  
DE - 51368 Leverkusen  
Germany

**Contact person** : commercial.services@momentive.com

**Telephone** : General information  
+390510924300 (Customer Service Centre)

### 1.4

**Emergency telephone number** : Europe, Israel & All other: +44 (0) 1235239670; Middle East:+44  
(0) 1235239671

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

**Classification according to Regulation (EC) No 1272/2008 as amended.**

Not classified

The product is not classified for chronic aquatic toxicity, for further details see section 16

**2.2 Label Elements** Not applicable

#### Supplemental label information

EUH210: Safety data sheet available on request.

**Additional Information:** No data available.

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**2.3 Other hazards**

**Endocrine disrupting properties-Toxicity**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Endocrine disrupting properties-Ecotoxicity**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 3: Composition/information on ingredients**

**Chemical nature:** Polydimethylsiloxane containing vinyl groups.

**3.2 Mixtures**

**General information:** No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Toluene	0,1 - <1%	108-88-3	203-625-9	01-2119471310-51-XXXX	Not applicable	#
Octamethylcyclo-tetrasiloxane	0,01 - <0,1%	556-67-2	209-136-7	01-2119529238-36-XXXX	Aquatic Toxicity (Chronic): 10	PBT, vPvB

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

**Classification**

Chemical name	Classification	Notes
Toluene	Flam. Liq.: 2: H225; Skin Irrit.: 2: H315; Repr.: 2: H361d; STOT RE: 2: H373; STOT SE: 3: H336; Asp. Tox.: 1: H304; Aquatic Chronic: 3: H412; No data available.	No data available. No data available.
Octamethylcyclotetrasiloxane	Flam. Liq.: 3: H226; Repr.: 2: H361f; Aquatic Chronic: 1: H410;	

CLP: Regulation No. 1272/2008.

**SECTION 4: First aid measures**

**General:** Get medical attention if symptoms occur.

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**4.1 Description of first aid measures**

- Inhalation:** Move to fresh air. Get medical attention if any discomfort continues.
- Eye contact:** Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.
- Skin Contact:** Important to remove the substance from the skin immediately. Wash area with soap and water.
- Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water. Get medical attention.

**4.2 Most important symptoms and effects, both acute and delayed:** No data available.

**4.3 Indication of any immediate medical attention and special treatment needed**

- Hazards:** No data available.
- Treatment:** No data available.

**SECTION 5: Firefighting measures**

**General Fire Hazards:** Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**5.1 Extinguishing media Suitable extinguishing media:**

All standard extinguishing agents are suitable.

**Unsuitable extinguishing media:**

Avoid water in straight hose stream; will scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture:**

In case of fire, carbon monoxide and carbon dioxide may be formed. Use water spray to keep fire-exposed containers cool.

**5.3 Advice for firefighters Special fire-fighting procedures:**

Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

**Special protective equipment for fire-fighters:**

Wear self-contained breathing apparatus and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Caution: Contaminated surfaces may be slippery.

**6.2 Environmental Precautions:**

Prevent runoff from entering drains, sewers, or streams.

**6.3 Methods and material for containment and cleaning up:**

Collect spillage with granulates, sawdust, rags or other absorbent. Shovel up and place in a container for salvage or disposal. Flush away spillage with plenty of water. Caution: Contaminated surfaces may be slippery.

**6.4 Reference to other sections:**

See Section 8 of the SDS for Personal Protective Equipment.

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**SECTION 7: Handling and storage:**

- 7.1 Precautions for safe handling:** Wear appropriate personal protective equipment. Pack only into unbreakable packing materials (no glass containers !) to avoid contact with substances mentioned in Section 10.
- Storage conditions:** Keep away from sources of ignition - No smoking. Store in original container. Keep away from heat and flame.
- 7.2 Conditions for safe storage, including any incompatibilities:** Keep away from water, acids, alkalis, amines and alcohols. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed and in a well-ventilated place.
- Storage Stability:** Material is stable under normal conditions.
- 7.3 Specific end use(s):** No data available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control Parameters  
Occupational Exposure Limits**

Chemical name	Type	Exposure Limit Values	Source
Toluene	TWA	50 ppm 192 mg/m3	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended (12 2009)
	STEL	100 ppm 384 mg/m3	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended (12 2009)
	STEL	100 ppm 384 mg/m3	EU. Scientific Committee on Occupational Exposure Limit Values (SCOELs), European Commission - SCOEL, as amended (2014)
	TWA	50 ppm 192 mg/m3	EU. Scientific Committee on Occupational Exposure Limit Values (SCOELs), European Commission - SCOEL, as amended (2014)

**Biological Limit Values**

None.

**8.2 Exposure controls**

**Appropriate Engineering Controls:** Eyewash bottle with clean water.

**Individual protection measures, such as personal protective equipment**

**General information:** Use only in well-ventilated areas. Do not eat, drink or smoke when using the product. Wash hands after handling. Avoid contact with skin and eyes.

**Eye/face protection:** Safety glasses with side-shields conforming to EN166

**Skin protection**

**Hand Protection:** Advice: There is no risk to health due to contact with the chemical. Use hand protection to prevent mechanically injuries.

**Other:** No data available.

**Respiratory Protection:** No protection is ordinarily required under normal conditions of use and with adequate ventilation.

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**Hygiene measures:** Avoid contact with eyes, skin, and clothing. Wear suitable gloves and eye/face protection. Observe good industrial hygiene practices. Wash hands after handling. When using do not eat, drink or smoke.

**Environmental exposure controls:** No data available.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	> 260 °C (1,013 hPa)
<b>Flash Point:</b>	> 148 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%):</b>	No data available.
<b>Flammability Limit - Lower (%):</b>	No data available.
<b>Vapor pressure:</b>	Negligible
<b>Relative vapor density:</b>	1,0
<b>Density:</b>	ca. 1.020 g/cm <sup>3</sup>
<b>Relative density:</b>	1,02
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Negligible
<b>Solubility (other):</b>	Toluene
<b>Partition coefficient (n-octanol/water) Log Pow:</b>	No data available.

<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	Material is stable under normal conditions.
<b>SADT:</b>	No data available.
<b>Viscosity, dynamic:</b>	No data available.
<b>Viscosity, kinematic:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

**9.2 Other information**

**VOC Content:** 1,5 g/l

**SECTION 10: Stability and reactivity**

**10.1 Reactivity:** No data available.

**10.2 Chemical Stability:** Material is stable under normal conditions.

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- 10.3 Possibility of hazardous reactions:** Hazardous polymerization does not occur.
- 10.4 Conditions to avoid:** Heat, sparks, flames.
- 10.5 Incompatible Materials:** Evolves hydrogen on contact with acids, alkalis, alcohols, powdered metals or, as the case may be, metal oxides.
- 10.6 Hazardous Decomposition Products:** Oxides of silicon. Carbon oxides Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

**SECTION 11: Toxicological information**

**General information:** Experience has shown, that the above mentioned product can be used without any danger to health, as long as the usual conditions of industrial hygiene are observed.

**Information on likely routes of exposure**

- Inhalation:** No data available.
- Ingestion:** No data available.
- Skin Contact:** No data available.
- Eye contact:** No data available.

**11.1 Information on toxicological effects**

**Acute toxicity**

**Oral**

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- Toluene LD 50 (Rat): > 5.000 mg/kg
- Octamethylcyclotetrasiloxane LD 50 (Rat): > 4.800 mg/kg

**Dermal**

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- Toluene LD 50 (Rabbit): 12.124 mg/kg
- Octamethylcyclotetrasiloxane LD 50 (Rat): > 2.375 mg/kg

**Inhalation**

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- Toluene LC50 (Rat, 4,00 h): 30,6 mg/l
- Octamethylcyclotetrasiloxane LC50 (Rat, 4 h): 36 mg/l

**Repeated dose toxicity**

- Product:** No data available.
- Specified substance(s)**
- Toluene No data available.
- Octamethylcyclotetrasiloxane No data available.

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**Skin Corrosion/Irritation:**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane OECD Test Guideline 404 (Rabbit): Non irritating

**Serious Eye Damage/Eye Irritation:**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating

**Respiratory or Skin Sensitization:**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): Not sensitizing

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)  
 Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

**In vivo**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative  
 Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative

**Carcinogenicity**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

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**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

**Aspiration Hazard**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Product:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;

**Components:**

Toluene No data available.  
 Octamethylcyclotetrasiloxane No data available.

**Other effects:** No data available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Acute toxicity**

**Fish**

**Product:** No data available.

**Specified substance(s)**

Toluene LC0 (Leuciscus idus, 48 h): 52 mg/l  
 LC50 (Leuciscus idus, 48 h): 70 mg/l  
 LC50 (Pimephales promelas, 96 h): 34 mg/l  
 Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0,022 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s)**

Toluene LC0 (Daphnia magna): 93 mg/l  
 (Daphnia magna): 270 mg/l



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Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0,015 mg/l

**Chronic Toxicity**

**Fish**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0,015 mg/l

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0,022 mg/l

**12.2 Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane (29 d, 310 Ready Biodegradability - CO<sub>2</sub> in Sealed Vessels (Headspace Test)): 3,7 % Persistent Not readily biodegradable.

**BOD/COD Ratio**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane No data available.

**12.3 Bioaccumulative potential**

**Product:** No data available.

**Specified substance(s)**

Toluene No data available.

Octamethylcyclotetrasiloxane Bioconcentration Factor (BCF): 12.400

**12.4 Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

Toluene No data available.

Octamethylcyclotetrasiloxane No data available.

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**12.5 Results of PBT and vPvB assessment:**

Toluene Octamethylcyclotetrasiloxane	No data available.  No data available. Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)	Octamethylcyclotetrasiloxane (D4) meets the current EU REACH Annex XIII criteria for PBT and vPvB and has been added to the candidate list for Substances of very high concern (SVHC)., <i>However our understanding of the available science is that D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by naturally occurring reactions in the atmosphere. Any D4 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms.</i>
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**12.6 Endocrine disrupting properties:**

<b>Product:</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Components:</b>	
Toluene	No data available.
Octamethylcyclotetrasiloxane	No data available.

**12.7 Other adverse effects:**

<b>Other hazards</b>	
<b>Product:</b>	No data available.
<b>Additional Information:</b>	Ecotoxicological data for this product is not available.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

<b>General information:</b>	The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground.
<b>Disposal methods:</b>	Can be incinerated when in compliance with local regulations.

**SECTION 14: Transport information**

**ADR**  
 Not Regulated.

**ADN**  
 Not Regulated.

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**RID**

Not Regulated.

**IMDG**

Not Regulated.

**IATA**

Not Regulated.

**14.6 Special precautions for user:** Keep away from food, drink and animal feeding stuffs. This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code :**

Not applicable

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**EU Regulations**

**Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:** none

**Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances:** none

**EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended:** none

**Regulation (EC) No. 649/2012 Import and export of dangerous chemicals:** none

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:** none

**EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):** none

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:**

Chemical name	CAS-No.	Concentration
Toluene	108-88-3	0,1 - 1,0%

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:** none

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:**

Chemical name	CAS-No.	Concentration
Toluene	108-88-3	0,1 - 1,0%

**EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances,**

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**Annex I:**

Classification	Lower-tier Requirements	Upper-tier Requirements
E1. Hazardous to the aquatic environment		
P5b. Flammable liquids	50 t	200 t
P5c. Flammable liquids	5.000 t	50.000 t
P5a. Flammable liquids	10 t	50 t

**EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:**

Chemical name	CAS-No.	Concentration
Toluene	108-88-3	0,1 - 1,0%

**Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:**

Chemical name	CAS-No.	Concentration
Toluene	108-88-3	0,1 - 1,0%

**15.2 Chemical safety assessment:**

No Chemical Safety Assessment has been carried out.

**Inventory Status**

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	E (special case)	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.

**SECTION 16: Other information**

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**RTV 12A**

**Revision Information:** Not relevant.

**Key literature references and sources for data:** The partition coefficient of D4 between PDMS and water has been determined as  $\log K_{PDMS-water} = 7.09$ . It follows that PDMS containing up to 3%w/w D4 will generate a thermodynamic limit concentration of 2.4 µg D4/L in the water phase. The critical 21d-NOEC for daphnia of 7.9 µg D4/L will not be reached. The product is therefore not classified for chronic aquatic toxicity

**Wording of the H-statements in section 2 and 3**

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

**Training information:** No data available.

**Issue Date:** 02.08.2023

**Disclaimer:**

**Notice to reader**

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.

They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives.

**Further Information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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